LISTING OF THE CLAIMS

The following listing of claims is included for convenience purposes only. No new amendments are presented by this listing.

1. (Original) A light emitting heterostructure comprising:

a substrate;

a light generating structure formed over the substrate;

a distributed semiconductor heterostructure Bragg reflector (DBR) structure formed over the light generating structure; and

a p-type layer formed over the DBR structure.

2. (Original) The heterostructure of claim 1, further comprising an electron blocking layer formed between the light generating structure and the DBR structure.

3. (Original) The heterostructure of claim 1, further comprising:

a buffer layer formed on the substrate; and

a second layer formed on the buffer layer, wherein the light generating structure is formed on the second layer.

4. (Original) The heterostructure of claim 3, further comprising a contact layer formed on the second layer.

5. (Original) The heterostructure of claim 1, further comprising a contact layer formed above the DBR structure.

6. (Original) The heterostructure of claim 5, further comprising a metal layer formed on the contact layer.

7. (Original) The heterostructure of claim 1, further comprising an anodized aluminum layer formed over the DBR structure.

8. (Original) The heterostructure of claim 7, wherein the anodized aluminum layer forms a photonic crystal.

9. (Original) The heterostructure of claim 1, further comprising a reflective layer formed over the DBR structure.

10. (Original) The heterostructure of claim 1, wherein the substrate comprises a transparent substrate.

11. (Original) A light emitting device comprising:

a substrate;

an n-type layer formed over the substrate;

a light generating structure formed over the n-type layer;

a distributed semiconductor heterostructure Bragg reflector (DBR) structure formed over the light generating structure; and

a p-type layer formed over the DBR structure.

12. (Original) The device of claim 11, further comprising a reflective layer formed on the p-type layer.

13. (Original) The device of claim 12, further comprising a contact layer formed on the p-type layer, wherein the reflective layer and the contact layer form at least one of: a set of alternating stripes and a set of alternating squares.

14. (Original) The device of claim 11, further comprising:

a first contact formed on the n-type layer; and

a second contact formed above the p-type layer.

15. (Original) The device of claim 11, wherein the device comprises at least one of: a light emitting diode (LED), an ultraviolet LED, and a laser.

16. (Original) An ultraviolet light emitting heterostructure comprising:

an n-type layer;

a light generating structure formed over the n-type layer;

a distributed semiconductor heterostructure Bragg reflector (DBR) structure formed over the light generating structure; and

a p-type layer formed over the DBR structure.

17. (Original) The heterostructure of claim 16, further comprising an anodized aluminum layer formed over the p-type layer.

18. (Original) The heterostructure of claim 17, wherein the anodized aluminum layer and the p-type layer include a set of holes that form a photonic crystal.

19. (Original) The heterostructure of claim 16, wherein the p-type layer includes a set of holes.

20. (Original) The heterostructure of claim 19, wherein at least some of the set of holes is filled with a material having a different refractive index than the p-type layer.

21. (Previously presented) The heterostructure of claim 16, further comprising a substrate, wherein the n-type layer formed over the substrate.

22. (Previously presented) The heterostructure of claim 1, further comprising an n-type layer formed over the substrate, wherein the light generating structure is formed over the n-type layer.